



EFFECT OF AGNIKARMA (THERMAL CAUTERY) AT DIFFERENT TEMPERATURES IN VATKANTAK WSR TO CALCANEAL SPUR

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ABSTRACT

Agnikarma¹ considered as best for pain relief & management in Ayurveda. Calcaneal spurs are highly prevalent in older people and causes lot of pain of excruciating type and disability. We have done some innovative idea in field of Agnikarma and in this research Agnikarma is done on painful heels (calcaneal spur) by Agni shalaka (Thermal cautery instrument) where temperature can be controlled in between 0-200 degrees and shalaka gets heated up from electricity. Results are analyzed on basis of clinical signs & symptoms and statistical analysis is done to see the results.

The study revealed that more the temperature more the pain relief. Agnikarma more effective in pain management at higher temperature nearly 190-200 degrees of Celsius in Vatakantak

KEY WORDS: Agnikarma, Agni shalaka, Pain management, Vatakantak.

Introduction:

- *VataKantak*² is one of the *Vata Vyadhi*³ which occurs in *Gulpha sandhi*⁴ region. It is characterized by *shool* (pain) and *shoth* (Inflammation) in *khudak* (Heel). It can be co-related with calcaneal spur in modern science. Calcaneal spur⁵ is a condition in which Osteophytes (bone spur) are formed on calcaneus bone⁶ and is characterized by pain during walking, swelling and tenderness over heel region treatment of *vatakantak* include-
- *Rakta Mokshana* (Blood letting)
- *Eranda tail pana* (Drinking of Castor oil)
- *Suchibhirev* (Niddle pricking)
- **Agnikarma**. (Thermal Cauterization)

In this context *Agnikarma* is used at different temperatures by instrument where temperatures can be controlled and shalaka gets heated through electricity.

Aim and Objective:

- To conduct a clinical study for efficacy of Agnikarma at different temperature in *Vatakantak* (Calcaneal spur)
- To improve the quality of life by managing pain in patients suffering with *Vatakantak* (calcaneal spur)
- Statistically analyze the efficacy of Agnikarma at different temperatures in *Vatakantak* based on collected Data

MATERIAL AND METHODS

- **Group A- Bindu**⁷ *Vat Agni Karma* at different temperatures on lateral Aspect of heel by special designed Agni karma instrument (which gets heated up from electricity.)
- **Group B** - Injection Triamcinolone Acetonide⁸

TRIAL GROUP:

Total Number of patients - 30

Treated patients till now are-30

Used temperature-

100-150 degrees Celsius in 13 patients

150-200 degrees Celsius in 17 patients

Ghritalepan was done after procedure and followed up is taken on 7th day.

CONTROL GROUP:

Number of patients - 15

Treated patients are- 15

PRE-PROCEDURE -

Cleaning With Betadine⁹

PROCEDURE -

Mark the site of maximum tenderness

Injection of Triamcinolone Acetonide (1cc) + diluted with 2%

Xylocaine¹⁰ (2cc) was given Intralesional at the site of more tenderness.

Dose - 40mg

POST PROCEDURE - Benzoine tincture¹¹ applied on site of injection

- **INCLUSION CRITERIA** - Patients having Calcaneal Spur was randomly selected.
- Selection was irrespective of Age, sex, religion & socio-economical class.
- **EXCLUSION CRITERIA** - Diabetes, Hypertension, IHD,
- Pregnancy.
- H.I.V, HBsAG positive patients.
- Fracture

RESULT AND ANALYSIS:

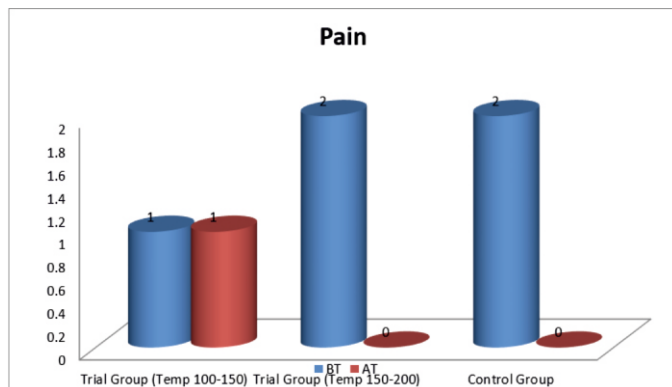
GROUP-A-PAIN AND TENDERNESS-

- Temperature between-100-150 °C.
- Treated patient-13
- Result-not satisfactory. though temperature nearer 150°C was having some effect on subsiding the clinical symptoms and sign
- Temperature between 150-200°C
- Treated patient-17
- Result-satisfactory

STATISTICAL ANALYSIS - Wilcoxon signed¹² - test used for this analysis

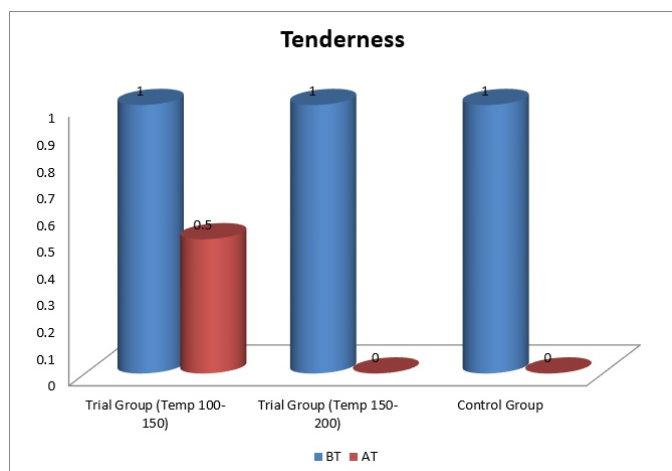
Pain			Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
Trial Group (Temp 100-150)	1	1	-1.414a	0.157	25.0	Not Significant
Trial Group (Temp 150-200)	2	0	-2.739a	0.006	76.5	Significant
Control Group	2	0	-3.416a	0.001	82.6	Significant

Since observations are on ordinal scale, we have used Wilcoxon Signed Rank test. From above table we can observe that P-Values for trial group (temp 100-150) is greater than 0.05 hence the effect observed is not significant, while P-Values for remaining two groups are less than 0.05 hence we conclude that effect observed is significant. Effect observed in Trial Group (Temp 100-150) was 25.0%, effect observed in Trial Group (Temp 150-200) was 76.5% and effect observed in Control Group was 82.6%.



Tenderness			Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
Trial Group (Temp 100-150)	1	0.5	-1.732a	0.083	50.0	Not Significant
Trial Group (Temp 150-200)	1	0	-2.714a	0.007	75.0	Significant
Control Group	1	0	-2.887a	0.004	82.4	Significant

Since observations are on ordinal scale, we have used Wilcoxon Signed Rank test. From above table we can observe that P-Values for trial group (temp 100-150) is greater than 0.05 hence the effect observed is not significant, while P-Values for remaining two groups are less than 0.05 hence we conclude that effect observed is significant. Effect observed in Trial Group (Temp 100-150) was 50.0%, effect observed in Trial Group (Temp 150-200) was 75.0% and effect observed in Control Group was 82.4%.



Discussion:

- Both the group followed up on 7th day. In Trial group patients treated with different temperatures from 100-200 Celsius.
- In control group patients are treated with injenacort with 2% xylocaine intralesionally
- Patients who treated with Agnikarma at near 150-200 Celsius got more relief which is equal to control group patients than who treated with 100-150 Celsius

Conclusion

- In all patients study, patients are treated with different temperature, patients are followed after 7th day.
- Conclusions withdrawn on obtained results shows that more the temperature more the pain relief.

Agni karma which is done near 150-200 Celsius got more relief than who is treated with 100-150 Celsius.

- Hence Agnikarma at higher temperatures is having instant pain relief properties

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